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User Manual
Broadxent BritePort DSL 8012-V1

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Manual Version 3.0
October 2004

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CAUTION: This device is intended to be connected by the user to a CSA/TUV/UL certified/listed IBM AT or compatible personal computers in the manufacturer's defined operator access area. Check the equipment operating/installation manual and/or with the equipment manufacturer to verify/confirm if your equipment is suitable for devices to be connected to it.

ATTENTION: Ce périphérique est destiné à être connecté par l'utilisateur à un ordinateur IBM AT certifié ou listé CSA/TUV/UL ou compatible, à l'intérieur de la zone d'accès définie par le fabricant. Consulter le mode d'emploi/guide d'installation et/ou le fabricant de l'appareil pour vérifier ou confirmer qu'il est possible de connecter d'autres périphériques à votre sytème.

Notice for the USA

FCC Part 15: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, this notice is not a guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician.

Caution

To comply with the limits for the Class B digital device, pursuant to Part 15 of the FCC Rules, this device must be installed in computer equipment certified to comply with the Class B limits.

All cables used to connect the computer and peripherals must be shielded and grounded. Operation with non-certified computers or non-shielded cables may result in interference to radio or television reception.

Modifications

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the device.

Notice for Canada

This apparatus complies with the Class "B" limits for radio interference as specified in the Canadian Department of Communications Radio Interference Regulations.

Cet appareil est conforme aux normes de CLASSE "B" d'interférence radio tel que spécifié par le Ministère Canadien des Communications dans les règlements d'interférence radio.

INTRODUCTION

Welcome to Broadxent BritePort World! Your new Digital Subscriber Line (DSL) modem takes you to a world of digital entertainment and exploration by giving you fast Internet connection through existing telephone lines.

Broadxent BritePort DSL Bridge 8012-V1 uses the most advanced “splitterless” Asymmetric DSL (ADSL) technology that transforms ordinary telephone lines into broadband high-speed digital lines for fast Internet access. BritePort 8012-V1 is compliant with both ITU G.Lite and G.DMT standards that provides downstream data transmission up to 8 Mbps and upstream data transmission up to 1 Mbps, depending upon your agreement with your DSL service provider.

This User Manual will help you during hardware installation, as well as setting up the computer's networking configurations.

This section provides you with safety instructions and information you should know before using your BritePort 8012-V1:

- Important Safety Instructions
- Model and Serial Numbers
- Minimum System Requirements
- Package Contents
- Getting Started
- Customer Information Record

Important Safety Instructions

This section provides basic safety information for your Broadxent BritePort DSL Bridge 8012-V1 modem.

Prior to using your modem, carefully read and understand the safety instructions. These instructions must be followed to reduce the risk of fire, electric shock, or personal injury.

- Make sure that your modem is not exposed to direct sunlight or excessive heat radiation.
- Keep your modem at a place where there is minimum risk of spilling any liquid.
- The surrounding ambient temperature must not exceed 40^0C (104^0F).
- Avoid humid conditions. Do not place the product near a water source or outlet such as a bath tub, sink, wash bowl, laundry tub, swimming pool, rain, wet or humid wall, and so on.
- Never clean your modem with a damp cloth or use any liquid cleaner.
- Do not press, put any weight, or bend the power cord connected to a telephone equipment.
- To avoid risk of an electric shock during lightning, do not use any telephone equipment that is connected to an electric socket.
- In case of a gas leak, do not use any electric switch that is located in the vicinity of the leak.
- To report a gas leak, do not use any telephone equipment that is connected to an electric power outlet in the vicinity of the leak.
- Do not use any electric product, electric cord, or power socket that is even partially damaged.
- Do not expose yourself to dangerous voltages by opening the cover of your modem or dismantling it.
- You must not access the internal assembly or circuit board of your modem — none of its parts are user replaceable.
- Do not dispose off the batteries in fire — they may explode and cause injury. Besides, you must follow the local codes for special disposal instructions.
- If your modem needs any service or repairs, only qualified service personnel must handle it.

Model and Serial Numbers

Your BritePort 8012-V1 has model and serial numbers. You can find it on the bottom of your modem. Note down the model and serial numbers for future reference.

Minimum System Requirements

For a proper operation of your Broadxent BritePort 8012-V1, refer to the minimum system requirements listed below:

1. *For your computer connected to the Ethernet port*
   - Intel® Pentium® 100 MHz or equivalent processor
   - Microsoft Windows® 95
   - 20 MB of free hard disk space
   - 32 MB of RAM
   - Installed Network Interface Card with an RJ-45 port

Package Contents

Before you begin hardware installation, check your BritePort 8012-V1 package to ensure all the following items are available:

- Broadxent BritePort DSL Bridge 8012-V1 unit
- One CD-ROM that contains
  - a) Installation Driver
  - b) User Manual (PDF)
  - c) Acrobat Reader
- DC power adapter
- RJ-11 Phone cable (6 feet length)
- RJ-45 straight Ethernet cable (6 feet length)
- User Guide
- User Manual
- Broadxent Microfilters (optional)

Getting Started

Before you begin hardware or software installation and configuration, read this section carefully:

- You must sign up with a DSL service provider.
- Make sure that your telephone line has been enabled for the DSL service.
- Follow these steps to connect your 8012-V1 modem to your computer and Internet:
  - (a) Install the hardware as explained in Chapter 1: Hardware Installation.
  - (b) Configure your BritePort as explained in the Chapter 2: System Configuration Tool.
  - (d) Configure the computer's Networking Properties as explained in the Chapter 3: Configuring Your Computer.
  - (e) Start using your DSL line.
- If you face any problem or for any clarification, you should go through Appendixes on Troubleshooting and Frequently Asked Questions.

Customer Information Record

Keep a record of your DSL service information:

User ID and Password	
E-mail Address	
Outgoing Mail Server (SMTP)	
Incoming Mail Server (POP3)	
IP Address*	
Subnet Mask*	
Default Gateway*	
Primary DNS Address	
Secondary DNS Address	
Virtual Path Identifier (VPI)	
Virtual Channel Identifier (VCI)	
BritePort's IP Address**	192.168.1.1
BritePort's Subnet mask**	255.255.255.0
Your IP Address during System Configuration only**	192.168.1.x (x can have any value from 2 to 254)
HTML System Configuration Password	8012-V1
DSL Service Provider's Telephone number	

* If your DSL service provider uses Dynamic Host Configuration Protocol (DHCP), then you will not be provided with this information.

** This information is to be entered only when you are required to check your VCI/VPI settings. You must not change these values, unless specifically asked by your service provider.

1. HARDWARE INSTALLATION

This chapter provides information about your BritePort 8012-V1, as well as hardware installation. To ensure the proper setup and performance, before you begin connecting cables and devices to your BritePort 8012-V1, you must carefully go through the following sections:

- Backside View of BritePort 8012-V1
- Connecting Microfilters
- Hardware Installation
- Indicator LEDs on BritePort 8012-V1

Backside View of BritePort 8012-V1

Located at the rear panel of your Broadxent BritePort 8012-V1(see Figure 1-1) are several connectors that allow you to attach your computer and a telephone equipment, as shown in Figure 1-2.

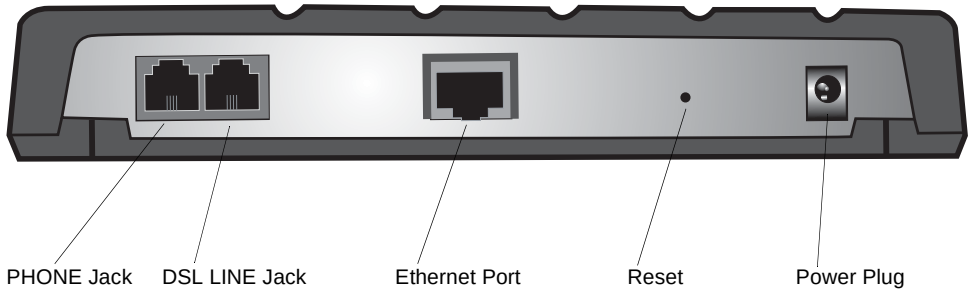

Figure 1-1: Backside view of BritePort 8012-V1

DSL LINE jack
Using the RJ-11 phone cable, connect your DSL-enabled telephone line (the wall phone outlet) to the DSL LINE jack located on your Broadxent BritePort 8012-V1.

PHONE jack
Optional: Connect a telephone equipment to the PHONE jack on your Broadxent BritePort 8012-V1. Be sure to connect a microfilter in series as shown in the Figure 1-2.

Note: This PHONE jack will work only for “splitterless” DSL line. If your service provider has installed a splitter, then do not use the microfilters.

Ethernet port
Using the RJ-45 Ethernet cable, the Ethernet port connects your Broadxent BritePort 8012-V1 to the Ethernet Network Interface Card in a PC. You can also use the Ethernet port on BritePort

8012-V1 to connect multiple computers through a hub. Then, you must use a proper Ethernet cable (crossed or straight) depending upon the type of port on the hub.

16V AC In socket
Use ONLY the supplied DC power adapter to power the BritePort 8012-V1.

Reset Switch
On the backside of BritePort 8012-V1, there is a Reset Switch for restoring the router's settings to the factory default values, if required. The Reset Switch allows the user to recover from situations like forgetting the BritePort's password, IP settings, and messing up with the configuration.

Connecting Microfilters

Each analog device, such as a telephone equipment, fax machine, answering machine, or analog modem that you connect on your DSL line requires a microfilter, as illustrated in Figure 1-2.

1. Plug one end of a RJ11 telephone cable into a microfilter and connect the analog device to the other end of this RJ11 cable.
2. Plug the other end of this microfilter, the end that has a RJ11 connector, into a telephone wall outlet.

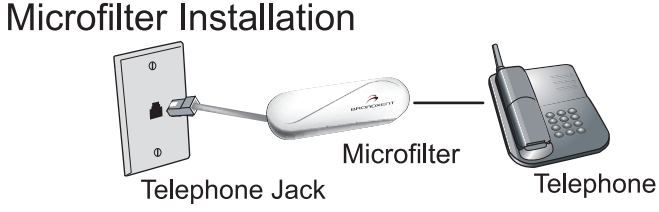

Figure 1-2: Microfilter Installation

Note: If your service provider has installed a splitter, then don't use the microfilters.

Connect your BritePort 8012-V1 as illustrated below:

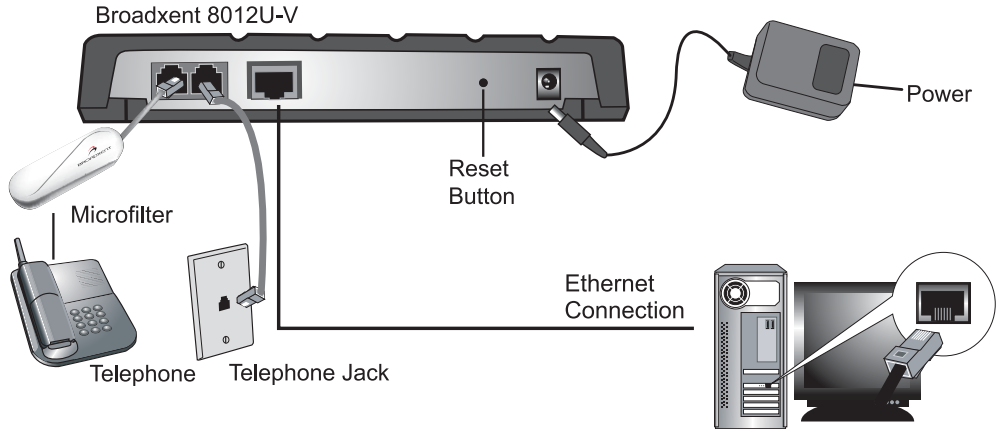

Figure 1-3: Hardware Installation for BritePort 8012-V1

Indicator LEDs on BritePort 8012-V1

Your BritePort 8012-V1 features indicator LEDs which provides you with your DSL connection status. Refer to the Figure 1-4 and Table 1-1 for the function of each LED.

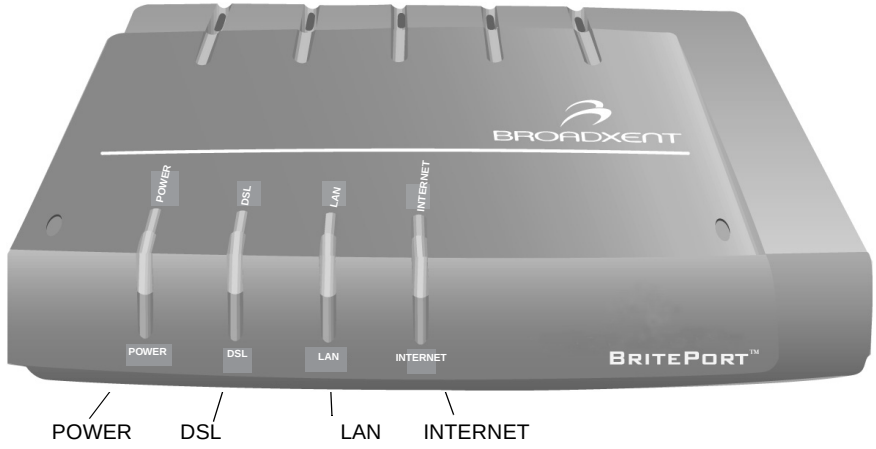

Figure 1-4: LEDs on BritePort 8012-V1

Table 1-1: Description of LEDs

LED	Description
POWER	ON when your BritePort 8012-V1 is connected to a power source.
DSL	Flashes for a few seconds and stays ON when a DSL connection is established.
LAN	ON when an Ethernet connection is detected.
INTERNET	ON when an PPPoE Login connected.

2. CONFIGURING YOUR COMPUTER

Before you can use your BritePort, you need to configure your computer properly to reflect the networking environment set by your DSL Service Provider. This chapter provides you with instructions on how to configure your BritePort network and how to configure your Internet setting using Broadband Blaster User Interface.

- In Windows 98 and Windows Me
- In Windows 2000
- In Windows XP
- Broadband Blaster User Interface

Before you begin configuring your computer, ensure that:

1. Your DSL service provider has provided you the IP address, Subnet mask, Gateway address, and DNS address. However, if your service provider uses Dynamic Host Configuration Protocol (or Dynamic IP address), you will not be provided with any such information.

2. To configure the computer connected to the Ethernet port of BritePort 8012-V1, ensure that your computer has a Network Interface Card (NIC) and it is functioning properly.

Networking Configuration in Windows 98, and Windows Me

1. In Windows 98 or Window Me, click **Start** -> **Settings** -> **Control Panel** (Figure 4-1).

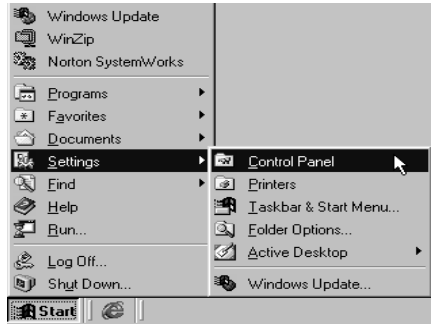

Figure 4-1

2. In the "Control Panel" window (Figure 4-2), double-click the **Network** icon.

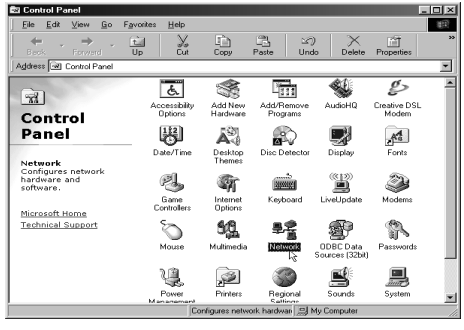

Figure 4-2

3. When the "Network" dialog box similar to Figure 4-3 appears, click the **Configuration** tab. Under the "The following network components are installed" list, click your Ethernet card to highlight it, for example, **TCP/IP->PRO/100+ Management Adapter (10/100)**. Click the **Properties** button

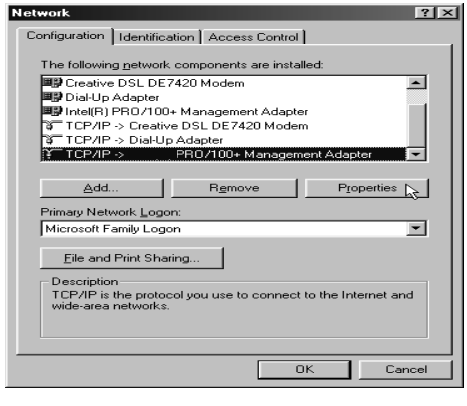

Figure 4-3

4. The “TCP/IP Properties” dialog box similar to Figure 4-4 appears. Click the **IP Address** tab.

   (a) For Dynamic IP Address:
   If your service provider uses Dynamic Host Configuration Protocol (DHCP), then in Figure 4-4 select the option **Obtain an IP address automatically** and click **OK**. The “System Setting Change” window appears (Figure 4-7) that prompts you to restart your computer so that the new settings take effect. Click **Yes** to restart your computer. This completes the Ethernet configuration, therefore skip the remaining steps.

   (b) For Static IP Address:
   If your service provider does not use DHCP, then in Figure 4-4 select the option **Specify an IP Address**. Fill the **IP Address** and **Subnet Mask** fields according to the values provided by your service provider and click the **Gateway** tab.

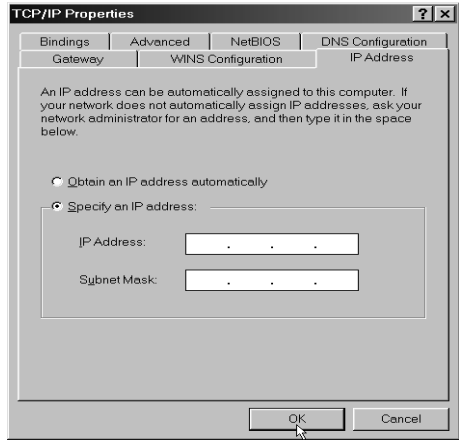
TCP/IP Properties
Bindings
Advanced
NetBIOS
DNS Configuration
Gateway
WINS Configuration
IP Address
An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.
Obtain an IP address automatically
Specify an IP address:
IP Address:
Subnet Mask:
OK
Cancel

Figure 4-4

5. In the TCP/IP dialog box with the **Gateway** tab selected (Figure 4-5), in **New gateway** field enter the Gateway address provided by your DSL service provider and then click **Add**. Click the **DNS Configuration** tab.

Figure 4-5

6. In the TCP/IP dialog box with **DNS Configuration** tab selected (Figure 4-6), select the option **Enable DNS**. Fill the **Host**, **Domain**, and **DNS Server Search Order** fields, according to the information provided by your service provider and click the **Add** tab. Now click the **OK** tab.

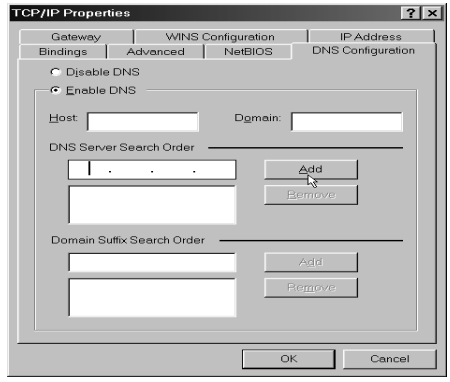

Figure 4-6

7. The "System Setting Change" window appears (Figure 4-7) that prompts you to restart your computer so that the new settings take effect. Click **Yes** to restart your computer.

System Settings Change
You must restart your computer before the new settings will take effect.
Do you want to restart your computer now?
Yes
No

Figure 4-7

Congratulations! You have successfully completed the network configuration in your computer.

1. In Windows 2000, click **Start** -> **Settings** -> **Control Panel** (Figure 4-8).

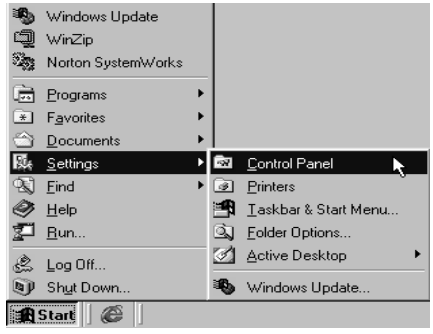

Figure 4-8

2. In the "Control Panel" window (Figure 4-9), double-click the **Network** icon.

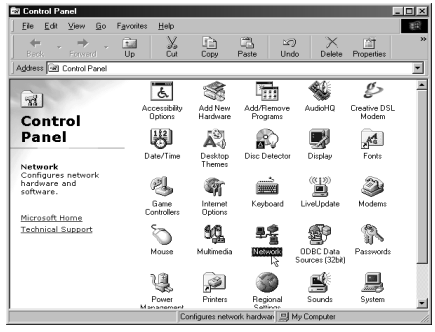

Figure 4-9

3. In the **Network and Dial-up Connections** window, right-click the **Local Area Connection** icon and then click the **Properties** option (Figure 4-10).

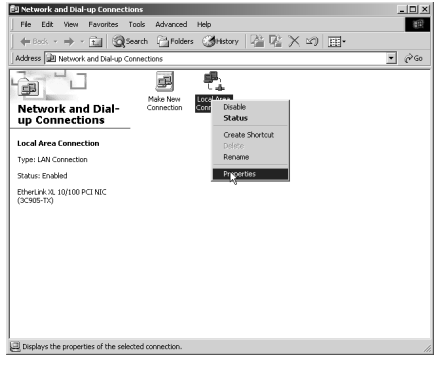

Figure 4-10

4. In the "Local Area Connection Properties" dialog box that appears (Figure 4-11), in the "Components checked are used by this connection" box, select **Internet Protocol (TCP/IP)** and click the **Properties** button.

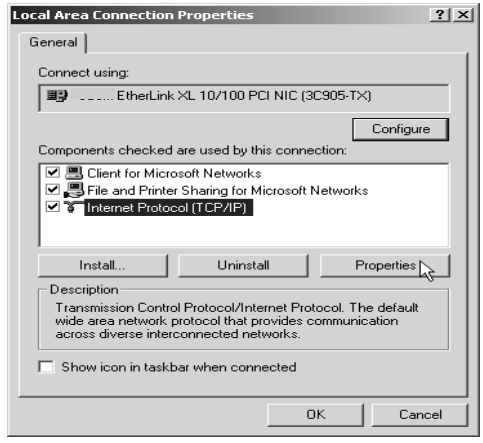

Figure 4-11

5. The "Internet Protocol (TCP/IP) Properties" dialog box appears (Figure 4-12).

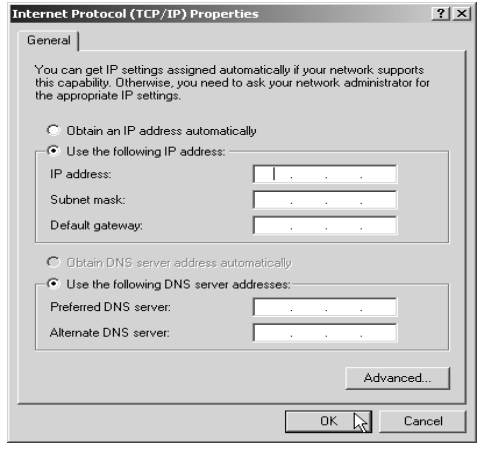
Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

Figure 4-12

(a) For Dynamic IP Address:
If your service provider uses Dynamic Host Configuration Protocol (DHCP), then in Figure 4-12 select the option **Obtain an IP address automatically** and click **OK**. This completes the Ethernet configuration, therefore skip the remaining steps.

(b) For Static IP Address:
If your service provider does not use DHCP, then in Figure 4-12 select the option **Use the following IP Address**. Fill the **IP Address, Subnet mask** and **Default Gateway** fields according to the values provided by your service provide. Then select **Use the following DNS server addresses** and fill the **Preferred DNS server** and **Alternate DNS Server** fields. Click **OK** to close the window.

6. On the "Local Area Connection Properties" window (Figure 4-11), click **OK** to complete the Ethernet configuration.

Congratulations! You have successfully completed the network configuration in your computer.

Networking Configuration in Windows XP

1. In Windows XP, click **Start** -> **Settings** ->**Network Connections**.

2. In the "**Network Connections**" window, double-click the **Local Area Connection** icon.

3. In the "Local Area Connection status" dialog box that appears (Figure 4-15), click the **Properties** button.

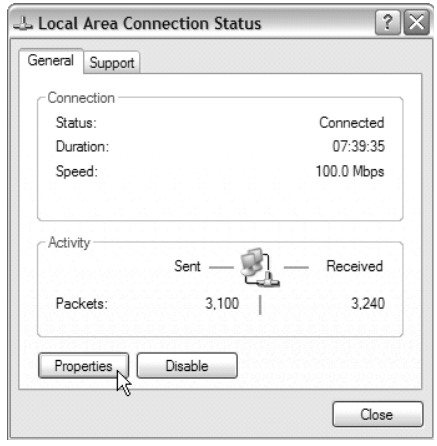

Figure 4-13

4. The "Internet Protocol (TCP/IP) Properties" dialog box appears (Figure 4-16).

   If your service provider uses Dynamic Host Configuration Protocol (DHCP), then in Figure 4-17 select the option **Obtain an IP address automatically** and click **OK**. This completes the Ethernet configuration, therefore skip the remaining steps.

Congratulations! You have successfully completed the network configuration in your computer.

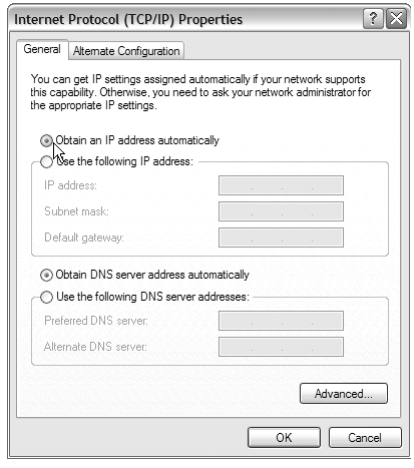
Internet Protocol (TCP/IP) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

Figure 4-14

Broadband Blaster User Interface

After you have configured your network use the **Broadband Blaster User Interface** to connect your DSL modem to the Internet.The following instructions are for all supported Windows operating systems.

1. Insert the Installation CD into your CD-ROM drive. Click on **Start** -> **Run** and type **d:\fscommand\Setup..exe.** Click **OK**

2. When the Broadband Blaster User Interface Install Wizard window appears, click **Next.** (Figure 4-17).

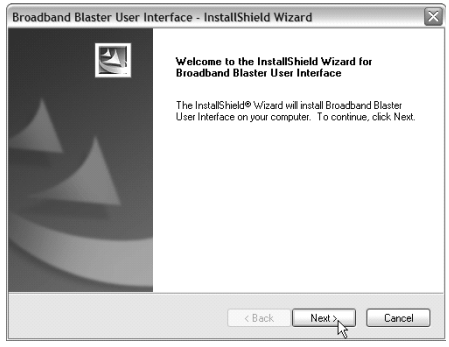
Broadband Blaster User Interface - InstallShield Wizard
Welcome to the InstallShield Wizard for Broadband Blaster User Interface
The InstallShield® Wizard will install Broadband Blaster User Interface on your computer. To continue, click Next.
< Back
Next >
Cancel

Figure 4-15

3. When the Ready to Install the Program window appears, click **Install.** (Figure 4-18)

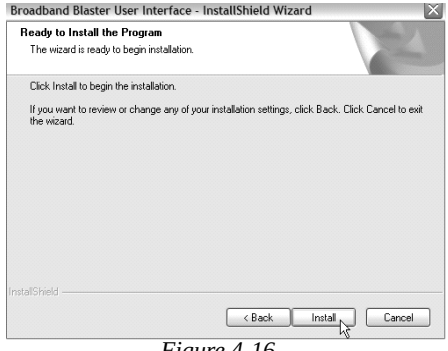
Broadband Blaster User Interface - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< Back
Install
Cancel

Figure 4-16

4. When the **InstallSheild Wizard Complete** window appears, click **Finish**. (Figure 4-19)

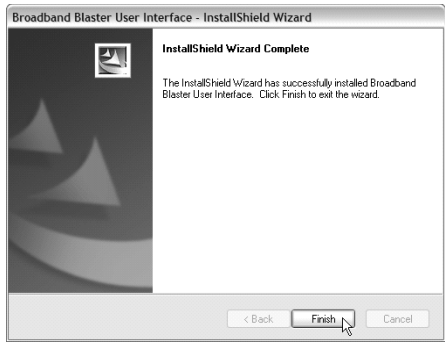
Broadband Blaster User Interface - InstallShield Wizard
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed Broadband Blaster User Interface. Click Finish to exit the wizard.
< Back
Finish
Cancel

Figure 4-17

5. In the Windows Task Bar, click on the **Broadband Blaster User Interface** Icon, as shown in Figure 4-20.

Figure 4-18

6. In the **Broadband Blaster User Interface** window, select the Login tab and enter your username and password supplied by your DSL service provider.(Figure 4-21). Click **Connect**.

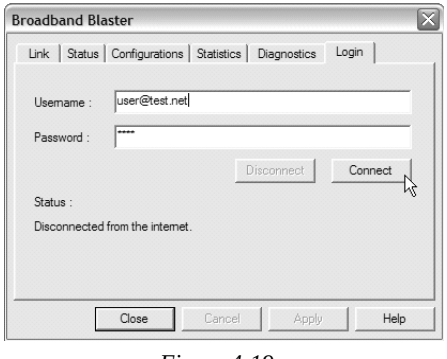

Figure 4-19

7. The **Broadband Blaster User Interface** window changes to Figure 4-22 when login is successful.

Figure 4-20

Congratulations! You have successfully completed the Installation of your BritePort 8012-V1 DSL modem.

3. BRITEPORT SETUP WIZARD

A BritePort 8012-V1 hosts an internal Web server that has a tool to configure the device according to the information provided by your ISP. The System Configuration tool is available for checking the system configuration, password, statistics, and for software upgrades. To use it, a Web browser such as Internet Explorer or Netscape Navigator/Communicator is required on your PC.

Default setting values pre-configured by the manufacturer are Encapsulation Mode = Haft Bridge & RFC 1483 Bridged, and LAN IP = 192.168.1.1. Do not change the default values, unless specifically instructed by your DSL service provider. If your service provider did not ask you to check the system configuration, do not proceed further or do not alter the default values.

This chapter is organized as follows:

- Opening BritePort's Configuration Page
- Using the Status Option

1. Start your Web browser. In the URL field (Address field) of your Web browser window, enter the IP address **192.168.1.1** (see Figure 3-1) and press the **Enter** key. This will take you to the login screen of the web-based configuration tool.(see Figure 3-2)

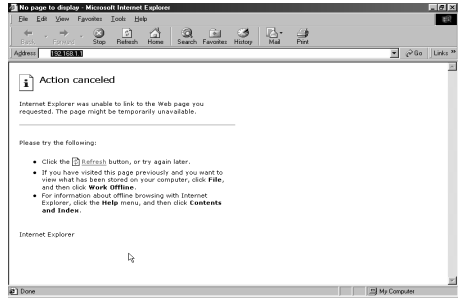
No page to display - Microsoft Internet Explorer
Action canceled
Internet Explorer was unable to link to the Web page you requested. The page might be temporarily unavailable.
Please try the following:
Internet Explorer

Figure 3-1

2. To login for the first time, your default username is “admin”, and the corresponding password is also “admin”, with all in lowercase letters.(see Figure 3-2)

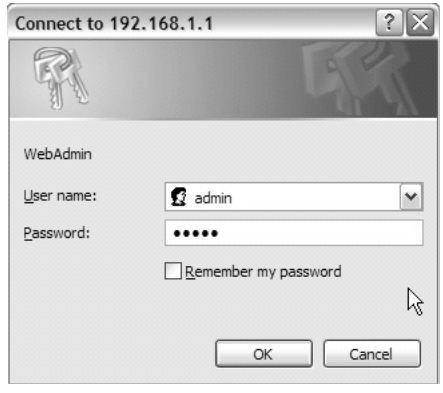

Figure 3-2

3. The “Broadxent DSL Modem Configuration” page appears (Figure 3-3).

BRITEPORT
Home
Wizard Setup
Status
DSL Connection
Diagnostic Tests
Restart Modem
Welcome to the Broadxent 8012-V
Web-based configuration manager
Please click on the Wizard Setup link in the main menu located in the left frame.
The Wizard Setup will lead you through the DSL Gateway configuration.

Figure 3-3

4. Click the **Wizard Setup** to open the "Wizard Setup" page, similar to Figure 3-4, and enter the user name and password provided by your DSL service provider. Click the **Connect** button.

Figure 3-4

5. Congratulations, you are now connected to the Internet and can start to use your DSL connection.

Figure 3-5

Using the Status Option

The **Status** option provides valuable information about your BritePort 8012-V1 and your DSL service setup. It consists of **DSL Connection**, and **Diagnostic Test**. While you are in the Status section, all pages are automatically refreshed approximately every 30 seconds.

DSL Connection

The **DSL Connection** provides the basic technical details about the DSL communication between your DSL service provider to your BritePort 8012-V1.
The data is generated based on the **Current DSL Line Mode**, which is set in **DSL Configuration** under the **Advanced Setup**. Information shown in the table includes **Speed, Latency, CRC Error, Up Time**, etc, as similar to figure 3-6.

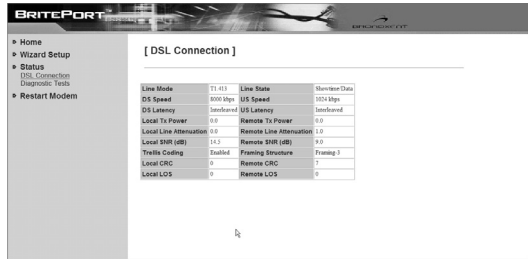

Figure 3-6

Diagnostics Tests

The **Diagnostic Test** allows you to ping the **Default Gateway** and **Primary DNS** as well as testing the connections of your BritePort 8012-V1 to both LAN and WAN networks. This feature provides the convenience for troubleshooting when you work with a complex LAN environment and/or are required to manage your DSL network at a remote location.
Running the **Diagnostic Test** will help you to identify the possbile causes of your DSL network problems. Refer to figure 3-6, to run the test, click the Test button next to each category. The test result will show under the **Result** column.

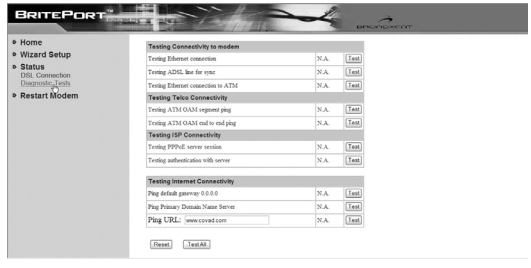

Figure 3-7

A. TECHNICAL SPECIFICATIONS

This section provides certain technical specifications for the BritePort 8012-V1:

Data Encapsulation Protocol:

- RFC 1483 Multiprotocol Encapsulation over ATM Adaptation Layer 5

ADSL Line Interface:

- ANSI T1.413
- ITU G.992.1 (G.DMT)
- ITU G.992.2 (G.LITE)

Electrical:

- AC Adapter
  Input 120 VAC, 60 Hz, 17 W
  Output 16 V AC, 750mA

Interface:

- Ethernet 10/100 Base-T (LAN)
- RJ-11 (WAN)

Dimensions:

- Length: 145 mm (5.7 in)
- Width: 125 mm (5 in)
- Height: 30 mm (1.3 in)

Factory Default Setting Values

Broadxent BritePort 8012-V1 — ADSL modem with built-in bridge pre-configured by the manufacturer. The factory default setting values are:

VPI = 0, VCI = 35
Encapsulation Mode = Combo (Haft Bridge & RFC 1483 Bridge)
8012-V1 IP Address = 192.168.1.1
8012-V1 Login name = admin, Password = admin

B. TROUBLESHOOTING

This appendix provides tips and solutions for resolving some of the problems that you may encounter while setting, installing, or using Broadxent BritePort DSL Bridge 8012-V1:

A. Possible Problems

1) BritePort 8012-V1 is not recognized by the Ethernet port on my computer

Cause 1. The Ethernet card on your computer may be faulty or the driver is not properly installed.

2. BritePort 8012-V1 is not connected properly or the Ethernet configuration is improper.

Solution Try the following:

- ❑ Make sure that you have not already connected this computer to the USB port on the BritePort 8012-V1.
- ❑ Make sure that the straight Ethernet cable is securely connected between the Ethernet port on 8012-V1 and the Ethernet card on your PC. Do not use crossed Ethernet cable.
- ❑ Try another straight Ethernet cable.
- ❑ If your BritePort is connected through a hub with Normal port, be sure that you have used a crossed Ethernet cable, however if the hub has Uplink port, then use straight Ethernet cable.
- ❑ Make sure that you have properly installed the driver for your Ethernet card. Each Ethernet card comes with its own driver.
- ❑ Reconfigure your computer for DSL connection, as per the information provided by your service provider.

3) The telephone line is noisy

Cause You may hear slight noise on your telephone while the modem is in operation. If the noise level becomes too loud and disrupts your telephone conversations, try the solution.

Solution Try the following:

- ❑ Ensure that each analog device such as a telephone, fax machine, and answering machine, sharing the same telephone line as your DSL modem, is connected to the telephone wall socket via an independent microfilter.
- ❑ Check if you have connected the microfilters properly.

- ❑ If your service provider has installed a splitter, do not use the microfilters.

4) BritePort does not connect to the Internet or the DSL LED keeps on flashing

Cause You did not connect your BritePort correctly and securely.

Solution Try the following:

- ❑ Make sure that your telephone line has been activated for the DSL service.
- ❑ Be sure that your computer is connected to your BritePort using a straight Ethernet cable. If your BritePort is connected through a hub with Normal port, be sure that you have used a crossed Ethernet cable, however, if the hub has Uplink port, then use straight Ethernet cable.
- ❑ Be sure that the power adapter is plugged in securely and power is switched on.
- ❑ Be sure that the phone line from the wall outlet is DSL enabled and is connected securely to the LINE jack of your BritePort.
- ❑ Reconfigure your computer for DSL connection, as per the information provided by your service provider. If you are required to specify your IP address, be sure that you have typed the values for IP address, Subnet Mask provided by your DSL service provider correctly.

5) The Internet connection is slow

Cause Your computer may not have enough cache or you must clear your cache.

Solution Try the following:

- ❑ Clear the cache on your Internet browser:
  On Internet Explorer window, click **Tools** menu and click **Internet Options**. On the "Internet Options" window, click the **General** tab. Then, under "History" click **Clear History** and click **Yes** to empty the cache. Also for "Days to keep pages in history:" make the adjustment according to your requirement.
  Important: Your browser automatically stores all recently visited sites on a cache memory on your computer. Next time when you access a recently visited website, your browser immediately delivers the cached date on to the screen. You should always empty the cache on a regular basis and after a session of heavy web browsing.
- ❑ Delete temporary Internet files:
  On the Internet Explorer go to the **Internet Options** window and click the **General** tab. Under "Temporary Internet files," click **Delete Files** and click **Yes** to delete all temporary Internet files.
- ❑ Increase the cache:

According to your requirement, you may increase the cache size. On the Internet Explorer go to the Internet Options window and click the General tab. Under "Temporary Internet files," click **Settings**. The window that appears allows you to adjust the "Amount of disk space to use" or the cache.

- ❑ Close all the open applications and reboot your computer:
  Click **Start -> Shutdown -> select Restart -> Yes**. If warm reboot is unsuccessful, shut off power to the computer and turn on after waiting for a few seconds.

6) The Web browser does not connect to the BritePort Configuration page

Cause You may not be using the correct IP address or Subnet Mask.

Solution Try the following:

- ❑ Make sure that your telephone line has been activated for the DSL service.
- ❑ In the URL field (Address field) of your Web browser, make sure that you have typed the correct IP address: **192.168.1.1**.
- ❑ Check your Subnet Mask:
  1. Click **Start** -> **Settings** -> **Control Panel**. In the Control Panel, double-click the **Network** icon. In Windows 2000, you also need to double-click the **Local Area Connection** icon to see the "Local Area Connection Properties" dialog box.
  2. *The computer connected to the Ethernet port of 8012-V1:*
     When the "Network" dialog box similar to Figure B-4 appears, click the **Configuration** tab. Under the "The following network components are installed" list, click your Ethernet card to highlight it, for example, **TCP/IP->PRO/100+ Management Adapter**. Click the **Properties** button.

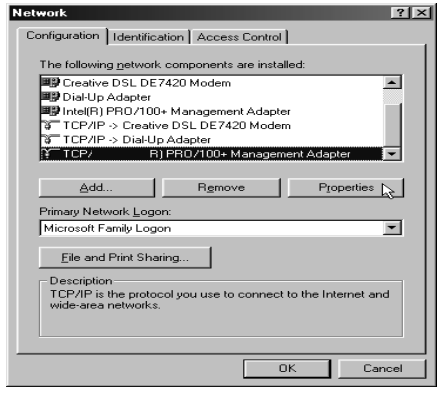

Figure B-1

3. In the “TCP/IP Properties” dialog box (Figure B-6), click the **IP Address** tab and make sure that IP Address is 192.169.1.2 and the Subnet Mask is **255.255.255.0**. Click **OK** to close this dialog box.

4. Again click the **OK** button on the “Network” window to close it.

5. Restart your computer when prompted.

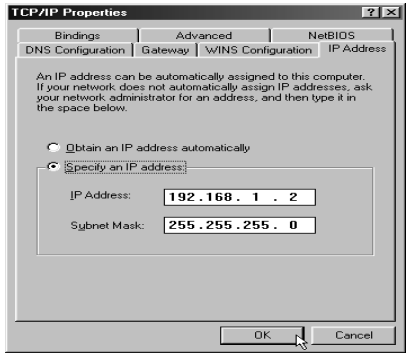

Figure B-3

B. BritePort LED Status

Observe the LEDs on your BritePort to check if the device is functioning properly.

Normal Setup Status

When your BritePort is powered up, after a few seconds, all the LEDs go into their correct states:

Power - ON when your BritePort is connected to a power source and is switched ON
LAN - ON if the Ethernet is detected
Internet - ON when your PPPoE Login sucess
DSL - ON when DSL connection is established, otherwise blinks

C. Possible Problems

1. The Power LED on BritePort is OFF

Cause Your BritePort is not properly powered.

Solution Try the following solutions:

- ❑ Make sure that the DC power adapter is firmly plugged into both the wall outlet and your BritePort.
- ❑ Be sure to turn ON your BritePort, as well as the power outlet.

2. The LAN LED on BritePort is OFF

Cause Your BritePort is not properly connected to a computer through the Ethernet or USB port.

Solution Try the corresponding solutions:

- ❑ Ensure that both ends of the RJ-45 Ethernet cable are plugged in securely — one end to the Ethernet port of 8012-V1 and other end to the Network Interface Card on the computer.
- ❑ Be sure that you have used a straight Ethernet cable. However, if you are connecting to multiple computers through a hub with Normal port, be sure that you have used a crossed Ethernet cable, however if the hub has Uplink port, then use straight Ethernet cable. Also use a straight Ethernet cable to connect your computer to the hub.
- ❑ Ensure that your Ethernet card is functioning properly and you have properly installed its driver. Each Ethernet card comes with its own driver.
- ❑ Ensure that you have configured your computer correctly according to the information provided by your DSL service provider.

3. The Internet LED on BritePort is OFF and data is not transmitting

Cause Your 8012-V1 failed to connect to ISP PPPoE Authentication Server .

Solution Try the following solution:

- ❑ Launch your BBUI Application or Web browser http://192.168.1.1.
- ❑ Check the Login page connection status. If not connected, try to click connect button.
- ❑ Once again configure your computer as instructed and
  Make sure that you have entered the Login information correctly according to the Information provided by your service provider.

4. The DSL LED on BritePort keeps blinking

Cause Your BritePort 8012-V1 is not properly configured/setup or your DSL service is down.

Solution Try the following solutions:

- ❑ Make sure that your telephone line has been activated for the DSL service.
- ❑ Check your telephone line for the dial-tone. If your telephone line is down, you will not have DSL service. Contact your telephone company.
- ❑ Be sure that the telephone cable is connected correctly to your BritePort.
- ❑ Try connecting again after a few minutes as external interference might have caused noise to your DSL line.
- ❑ Attach microfilters to all phone jacks connected to analog devices that share the same line as your DSL connection.
- ❑ Be sure that you have configured your BritePort correctly. See Chapter 3: System Configuration Tool.
- ❑ Check with your DSL service provider.

C. FREQUENTLY ASKED QUESTIONS

Here are answers to a few frequently asked questions regarding Broadxent BritePort DSL Bridge 8012-V1:

1 What is DSL?

DSL is a Digital Subscriber Line technology that transforms ordinary telephone lines into high-speed digital lines for fast Internet access. This technology uses a digital coding technique to get large capacity out of your existing phone line without interfering with regular services — you can talk on your phone and at the same time surf the Web. Thus DSL provides simultaneous Internet and voice/fax capabilities over a single telephone line without any interference.

2 What is ADSL?

Many different DSL technologies have been developed and Asymmetric Digital Subscriber Line (ADSL) is undoubtedly the most popular DSL technology for individuals and small businesses that require higher downstream (or download) data rates than upstream (or upload) data rates. Symmetrical Digital Subscriber Line (SDSL) provides the same amount of bandwidth upstream and downstream — up to 2 Mbps both upstream and downstream. For those who also require high uploading speeds, for example to connect an FTP server, SDSL may be a better choice.

3 What does a microfilter do?

A microfilter is installed in series with an analog device such as a telephone, fax machine, answering machine, and analog modem. It filters the regular voice band signals, i.e., the analog signals and blocks the higher frequency digital signals. Thus a microfilter enables the user to use regular phone line for voice/fax without any interference by the DSL signals. However, if your service provider has installed a splitter, do not use microfilters.

4 Which operating systems does my modem support?

Broadxent, Inc. makes a wide range of DSL modems. Before buying a modem makes sure that it supports the operating system on your computer. For example, for the Ethernet connection, Broadxent 8012-V1 supports Windows 95, Windows 98, Windows Me, Windows NT, and Windows 2000, and for the USB connection Broadxent BritePort 8012-V1 supports Windows 98, Windows Me, and Windows 2000.

5 Can I connect more than one computer to my BritePort 8012-V1?

Yes. The BritePort 8012-V1 has a USB port and an Ethernet RJ45 port — connect one computer to the Ethernet RJ45 port and other computer to the USB port. Thus two computers can share the same DSL line and have different IP addresses. However, for the assignment of IP addresses and configuration, you should talk to your service provider. Also, if your ISP requires login authentication, you need two different User Names and Passwords.
You can connect BritePort's Ethernet port to a hub, bridge, or router and then connect a few computers to the hub, bridge, or router. Thus you can have many computers sharing the same DSL line.

6 Can I connect multiple computers through a hub?

Yes, multiple computers connected through a hub or switch can share the same DSL line.

7 Can I connect multiple computers through a router?

Yes, you can connect multiple computers through a DSL router connected to the Ethernet port of BritePort 8012-V1. Thus, these computers can share a single public IP address.

8 Can I connect a LAN to my BritePort 8012-V1?

Yes, you can connect your LAN to the Ethernet port of BritePort 8012-V1. For example, you can connect multiple computers through your own DSL router.

9 How do I connect to the Internet?

DSL provides you a permanent, always-on, connection to the Internet. On your DSL connection, once you have installed the BritePort you are not required to dial any number or make or alter any connection.

10 What should I do if my DSL connection is not working?

A DSL connection provides a permanent dedicated connection to the Internet and the chances of its going down are very little. However, if this happen, you should first of all check the connections of your DSL modem as given in the user's manual. Follow the steps given in the Troubleshooting section.

11 Will my telephone work if my DSL line goes down?

Your DSL line can go down if the DSL equipment at your telephone company's office develops some problem, and this should not effect your normal telephone connection.

12 How can I check whether I have either Static or DHCP IP addressing?

For a static IP address, the service provider provides you IP address and Subnet Mask. Thus if your service provider gives you an IP address, then you have a static IP address.
On your desktop, right-click on the **Network Neighborhood** icon, then click **Properties**, then select **TCP/IP>Broadxent BritePort Bridge 8012-V1** to highlight it and click the **Properties** tab. In the TCP/IP window, click the **IP Address** tab and see what option has been selected. If "Specify an IP address" is selected, then you have Static IP address and the IP address and Subnet Mask are shown. If "Obtain and IP address automatically" is selected, then you have Dynamic IP address.

13 How can I find the IP address and the Subnet Mask?

In Windows, click the Start button and click Run. The "Run" dialog box appears. In the "Open" field, type **winipcfg** and click the **OK** tab. The "IP Configuration" window appears, which provides you information about your network including IP address, Subnet Mask, and Gateway.

14 Which Ethernet Cards are compatible with the BritePort 8012-V1?

The modem is compatible with almost all Network Interface Cards compliant to IEEE 802.3D Ethernet standard. The BritePort's Ethernet port speed is 10/100 Mbps.

15 Which protocols does the BritePort 8012-V1 support?

BritePort 8012-V1 supports TCP/IP — the suite of protocols for the Internet, which has become the global standard for communications. TCP/IP includes several protocols, the two main being TCP and IP.

16 Does the LAN connection of the BritePort 8012-V1 support 100 Mbps Ethernet?

Yes, BritePort 8012-V1 supports both 10 Mbps and 100 Mbps LAN traffic.

17 How safe is my DSL connection?

Your DSL connection provides you fast and permanent connection to the Internet. In spite of the fact that your computer is always connected to the Internet, the DSL security breaches are rare to come by because of the security system installed by your service provider. Besides, Windows 2000 and Windows Me have enough security feature. Windows 95/98 user can download security related patches from Mircosoft's website. However, you must develop safe computing habits:

- Protect your passwords. Do not divulge passwords to anyone and be especially careful if someone asks you for the password on-line or over the phone.
- Protect your on-line transactions by using secure browser.

- Before typing your credit card and other important information on-line, make sure that the website is secure and trustworthy.
- On your computer, for the folders that contain confidential and financial information, turn off the “File Sharing” option.
- When you are not using the Internet for a long duration, you may switch off your computer or disconnect it from the DSL line.
- You should use anti-virus software, as well as intrusion detection software and update it regularly.
- Do not open e-mail attachments unless you trust the sender and are sure of the identity of the sender.
- Do not download files and software from unreliable sources.

18 Can I have my own Web site?

Yes, the DSL connection provides a permanent connection to the Internet and you can run your Web server 24 hours a day. Talk to your service provider so that your machine has a static IP address.

D. GLOSSARY

In order to understand a new technology, it is important that you understand its terminology. This section offers basic explanation to some of the common networking and DSL terms.

ADSL - Asymmetric Digital Subscriber Line — A Digital Subscriber Line (DSL) technology that allows digital data to be sent over existing telephone lines and the downstream data rates are appreciably higher than the upstream data rates. Many different DSL technologies have been developed and ADSL is undoubtedly the most popular DSL technology for individuals and small businesses because ADSL offers higher downstream (or download) data rates than upstream (or upload) data rates.

Analog signal - A continuous signal, which is having a continuous range of values, for example the voice signal on the Public Telephone System.

ATM - Asynchronous Transfer Mode — A transfer mode in which the information is organized into fixed-length cells, each of 53 bytes. An ATM network handles data in gigabits per second.

Backbone - The part of the communications network intended and designed to carry the bulk of the traffic. It provides connectivity between various sub-networks in an enterprise's wide area network.

Bandwidth - A measure of the maximum rate of data transfer. Greater bandwidth allows the transfer of more information in a given period of time. For digital services, the bandwidth is usually expressed in bits or bytes per second.

Binary - A number system that has only two digits 0 and 1.

BPS - Bits Per Second — A measurement of data transmission speed.

Bridge - A hardware device that links two or more local area networks (LANs) and manages the transfer of data between these LANs.

Broadband - A transmission media that can handle the transmission of multiple messages, at different frequencies, at a time. The broadband signals use analog carriers.

Browser - See Web browser.

Cable modem - A modem that sends and receives digital data on the same cable that brings television broadcast signals to your home.

CAP - Carrierless Amplitude Phase modulation - A modulation technique used for transmitting digital data using an analog carrier. ADSL modems use either CAP modulation or Discrete Multitone (DMT) modulation.

CO - Central Office — a telephone company's office facility that handles the switching of telephone calls on the public switched telephone (PSTN) for a small regional area.

CPE - Customer Premises Equipment — The equipment installed at a customer's premises for the DSL service, for example a DSL modem.

Desktop - See Windows desktop.

DHCP - Dynamic Host Configuration Protocol — A method of assigning a temporary IP address to a host, such as a computer, connected on a specific network. With dynamic addressing, a particular host has a different IP address each time it connects to the network.

Digital - Having discrete values, for example the data represented by binary numbers (0's and 1's). Computers communicate using digital data.

DMT - Discrete Multitone — A method of modulating digital signals over an analog carrier.

DNS - Domain Name System — This allows you to specify a symbolic name, a meaningful and easy-to-remember "handle," instead of an IP address. The DNS is the way that Internet domain name are located and translated into Internet Protocol addresses.

Domain Name - The Internet address or the URL of a website.

Downstream - Data transfer from the telecommunication network to the customer's premises.

Driver - A program that a computer uses to control the operation of a peripheral device, such as a keyboard, modem, monitor, card, or cable.

DSL - Digital Subscriber Line — A technology that transforms ordinary telephone lines into high-speed digital lines for fast Internet access. This technology uses a digital coding technique to get large capacity out of your existing phone line without interfering with regular services — you can talk on your phone and at the same time surf the Web. Thus DSL provides simultaneous Internet and voice/fax capabilities over a single telephone line without any interference.

Dynamic IP address - See DHCP.

Ethernet - A local-area network (LAN) protocol that supports data transfer rates of 10 Mbps. It is one of the most widely implemented LAN standards that operates over the twisted pair or coaxial cable. A version of Ethernet, called 100 Base-T (or fast Ethernet), supports data transfer rates of

100 Mbps.

Ethernet card - A network interface card that plugs into a computer and allows the computer to send and receive data to and from a network.

Fast Ethernet - An Ethernet specification with a speed of 100 Mbps (10 times faster than 10BaseT).

Flash memory - A non-volatile memory on EEPROM chip, that can be erased and electrically and reprogrammed.

FTP - File Transfer Protocol — A high-level protocol for transferring files from one computer to another. FTP is one of the basic Internet services.

G.DMT - An industry standard known as G.992.1, which refers to ADSL technology that uses DMT modulation and does not require a splitter box to be installed at the user's premises. This technology supports upstream data rates of up to 8 megabits per second and downstream data rates of up to 1.544 megabits per second.

G.Lite - A "splitterless" ADSL technology that uses CAP or DMT modulation and supports upstream data rates of up to 1.5 megabits per second and downstream data rates of up to 512 kilobits per second.

Gateway - A network device — A dedicated network machine that connects two or more separate networks that may use different protocols (such as ATM and TCP/IP) and translates the protocols.

Hardware - All the electric and mechanical parts and devices used in a computer or attached to it.

HTML - Hypertext Markup Language — The format used for writing documents to be viewed with a Web browser. Items in the document can be text, images, and/or links to other HTML documents, sites, and resources on the Internet.

Hub - A device used for connecting nodes in a star topology, that is all the nodes are connected to a central hub. A *passive* hub simply organizes the wiring, while an *active* hub besides organizing the wiring, regenerates and retransmits the signals.

Interface - The physical arrangement that supports the attachment of a device to a connector or to another device.

Internet - The world's largest computer network, linking computers and networks all over the world, that communicate via a standard TCP/IP protocol.

Internet Explorer - A popular Web browser from Microsoft.

IP Address - The address for a computer on a TCP/IP network. IP address refers to a particular machine on the network. The format of an IP address is a 32-bit numeric address written as four numbers separated by periods. Each number can be 0 to 255, for example, 11.160.10.240 is an IP address. Any machine connected to the Internet is assigned an IP address.

ISDN - Integrated Services Digital Network — A special dial-up telephone wire connection that allows digital data transmission to co-exist with the telephone voice (analog) signals. ISDN requires a special phone line from the Telephone Company. The basic rate ISDN (also called 2B+D) is a four wire (two pairs of twisted telephone cable) connection that provides two B channels that transmits data at 64 kbps and third D channel that transmits data at 16 kbps.

ISP - Internet Service Provider — An organization that provides Internet access to the computer users.

LAN - Local Area Network — A computer network that spans a relatively small area. Most LANs are confined to an office, single building, or group of buildings.

LED - Light Emitting Diode — An electric component that emits light (turns ON) when current flows through it.

Local loop - The telephone lines running from a telephone company's central office in a local area to its customers' telephones at homes and offices.

Login - The account name (user name or user ID) and/or password used to access a computer system or a Web site.

kbps - Kilobits per second — a measure of data transfer speed.

KB - Kilobytes — 1,024 bytes.

Mac Address - Media Access Control — A unique address associated with an Ethernet card.

Mbps - Megabits per second — A measure of data transfer speed.

Megabits/Megabytes - One million bits/bytes.

Modem - A device that allows a computer to transmit data to other computers via telephone lines.

NAT - Network Address Translation — An Internet standard that enables a local-area network to use one set of IP addresses for internal traffic and a second set of IP addresses for external traffic. NAT provides a type of firewall security by hiding internal IP addresses. Since they’re used internally only, there’s no possibility of conflict with IP addresses used by other companies and organizations.

Netscape Navigator/Communicator - A popular Web browser.

NIC - Network Interface Card — A card that is installed in a computer so that it can be connected to a network. The NIC manages the flow of network information to and from the computer.

Octet - A group of eight binary bits. A less precise term for an octet is a byte.

Packet - A unit of information, which is data of a fixed length, sent as a whole from one device to another on a network. It contains a header with destination address and control information and a payload that has the user data.

Ping - Packet Internet Groper — An Internet program used to determine whether a specific IP address is accessible. It works by sending a packet to the specified address and waiting for a reply. PING is used primarily to troubleshoot network connections.

Plug-and-Play - The capability of an operating system to automatically detect any new device attached to the computer.

POTS - Plain Old Telephone Service — The term refers to the conventional telephone service using Public Switched Telephone Network (PSTN).

POTS Splitter - The POTS splitter box enables the telephone line — the plain old telephone service (POTS) — to carry voice signals and digital signals simultaneously. The DSL-enabled line is connected to the POTS splitter and the splitter provides two outputs — one containing both the POTS and DSL signals and the other containing only the POTS signals. To install a splitter box, a technician from your telephone company must visit the user's home. However, on a dedicated DSL connection, a splitter box is not required. Also ADSL Lite or ADSL G. Lite does not require the installation of a splitter box at the user's premises, and this division is achieved with software rather than hardware. Thus a visit by a telephone company technician is not required.

PPP - Point-to-Point Protocol — A communication protocol that allows a computer to be connected to the Internet.

Protocol - A set of agreed-upon rules for transmitting data between two devices. From a user's point of view, his computer must support the right protocols to make his machine communicate with other computers.

RADSL - A Rate Adaptive ADSL technology from Globespan Semiconductors.

Reboot - When a computer is shut down and restarted, it is rebooting.

RFC 1483 - A standard method used for linking different devices to communicate with each other across networks and assure "inter-operability."

RJ-11 - A connector/socket for two pairs (four wires) of twisted pair cable that is used primarily to connect telephone equipment in the United States.

RJ-45 - A connector/socket for four pairs (either wires) of twisted pair cable that is used commonly to connect computers onto a local-area network, especially to the Ethernet. A RJ-45 connector looks similar to the RJ-11 connector used for connecting a telephone equipment, however RJ-45 is slightly wider than RJ-11.

Router - A hardware device that connects two separately functional networks that use same or different protocols. Routers look at the destination addresses on the packets passing through them and then decide the best route to send them on.

SDSL - Symmetrical DSL — A DSL technology that provides the same amount of bandwidth (up to 1.5 Megabits) both upstream and downstream.

Segment - A physical or logical portion of a network. An Ethernet segment does not cross any bridge or router, but includes everything up to a bridge or router connection.

Service Provider - See ISP.

SNMP - Simple Network Management Protocol — A protocol used commonly for managing network devices remotely.

Subnet address - The portion of IP address that identifies the subnet.

Subnet Mask - A 32-bit address string that is used to identify the bits of an IP address that are used for the subnet address. A Subnet Mask is usually represented in dotted-decimal notation, for example, 255.255.255.0.

Subnet or Subnetwork - Any network that is a part of a larger IP network and is identified by a subnet address.

TCP/IP - Transmission Control Protocol/Internet Protocol. A suite of communication protocols that are used by computers or networking devices on the Internet so that they can communicate with each other. TCP/IP uses several protocols, the two main being TCP and IP.

Telco - The local telephone company office.

10 Base-T - Wiring standard used for Ethernet networks that can transmit data at up to 10 Mbps transmission using baseband unshielded twisted pair cable. Maximum allowable cable length is 100 meters (330 feet).

Twisted pair cable - A cable that consists of two wires twisted together. This cable is less

expensive than coaxial, whereas it is thinner and can break more easily than a coaxial cable.

Upstream - Data transfer from the customer's premises to the telecommunication network at CO.

URL - Universal Resource Locator — The addressing system that helps the users to locate websites on the Internet. It precisely tells the name of the server where a site's files are stored, the file's directory path, and its file name.

USB - Universal Serial Bus — A plug-and-play interface that allows the user to attach a device without having to add an adapter card and turning off the computer.

VPI - Virtual Path Identifier — A numerical value assigned by your DSL Service Provider to your DSL device to ensure proper connection with the DSL equipment at the Telephone Company's office.

VCI - Virtual Channel Identifier — A numerical value assigned by your DSL Service Provider to your DSL device. VCI goes hand in hand with VPI to ensure connection with your DSL Service Provider's equipment.

WAN - Wide Area Network — A computer network that spans a relatively large geographical area. Typically, a WAN consists of two or more local-area networks (LANs).

Web browser - A program used to access the Internet resources available through the World Wide Web.

Web server - A host computer that sends Web page to other computers.

World Wide Web - A vast resource of information stored on computers and servers connected to the Internet.

xDSL - Various DSL technologies has been developed and the "x" indicates the type of technology being implemented.

E. WARRANTY INFORMATION

Broadxent warrants that equipment furnished will be free from defects in material and workmanship for a period of one year from the confirmed date of purchase of the product new from the retail location. Upon written notice of any such defect, the manufacturer will, at its option, repair or replace the defective item under the terms of this warranty, subject to the provisions and specific exclusions listed herein.

This warranty shall not apply to equipment that has been previously repaired or altered outside our facilities in any way, nor will it apply if the equipment has been used in a manner exceeding its specifications or if the serial number has been removed.

We do not assume liability for consequential damages as a result from our product use, and in any event our liability shall not exceed the original selling price of the equipment.

The equipment warranty of Broadxent, Inc. shall constitute the sole and exclusive remedy of any Buyer of the manufacturer's equipment and the sole and exclusive liability of the manufacturer, its successors or assigns, in connection with equipment purchase and in lieu of all other warranties expressed, implied or statutory, including, but not limited to, any implied warranty of merchantability or fitness and all other obligations or liabilities of the manufacturer, its successors, or assigns.

Fill out the next page and mail or fax to Broadxent, Inc. for product registration.

Registration Card

Broadxent BritePort 8012-V1 Product Registration	
Name:	
Company:	
Address:	
City/State/ Zip:	
Phone:	
E-mail:	
Serial Number:	
Purchased from:	
Date of Purchase:	

Please cut out the above Product Registration Card and send in with a self-addressed stamped envelope to:

Broadxent, Inc.

188 Topaz Street

Milpitas, CA 95035

ATTN: Customer Service

FCC Registration Information for Users

This product is compliant and registered with the CFR47-Part 68 of the Federal Communications Commission (FCC). The FCC requires us to provide you with the following information:

- Connection to the nationwide telephone network should be made by using standard modular telephone jacks, type RJ-11.
- This equipment may not be used with 'Party Line' services or with 'Coin Telephone' lines.
- You should provide the FCC registration number and Ringer Equivalent Number (REN) of this product to your telephone company. The REN is useful in determining the number of devices you may connect to your telephone line and still have all of these devices ring when your telephone number is called.
- If your telephone equipment causes harm to the telephone network, the telephone company may discontinue your service temporarily. If possible, they will notify you in advance. If advance notice is not practical, you will be notified as soon as possible. You will have an opportunity to correct the problem, and you will be informed of your right to file a complaint with the FCC. Your telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the proper functioning of your product. If such changes are planned, you will be notified in advance.
- If it is determined that the equipment still fails to operate properly, the FCC requires that the unit be disconnected from the telephone line until the problem has been corrected. Repair to this equipment can only be made by the manufacturer, its authorized agents, or other parties who are authorized by the FCC.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device mat not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

Contact Information

Reach us by Phone:

Technical Support Hotline: (405) 742-2165

Monday - Thursday: 9.00 a.m. to 9.00 p.m. (Central Time)

Friday, Saturday, Sunday: 11.00 a.m. to 5.00 p.m. (Central Time)

Reach us by E-Mail:

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